**Tasking Memorandum No.** *OO-65*
**Memorandum For** Commanders DCMDs, DCMC CAOs
**Subject:** Year 2000 (Y2K) Transition and "Old" Network Servers
**Date:** December 14, 1999
**Suspense Dates:** December 17, 1999; December 30, 1999; January 21, 2000
**Target Audience:** All DCMC Commanders and Information Technology (IT) Personnel

**Requirement(s):**

- The DCMC Information Office has become aware over the last several days that many "older" network servers (e.g., those with Pentium 100 megahertz and below processors) that we expected to be retired well before the Y2K transition are, in fact, still in service. These machines' basic input/output systems cannot be upgraded for Y2K compliance. They must be removed from our networks.
- The DCMC Information Office has also noted that a large number of "desktop" personal computers (PCs) are being used as servers. These machines do not possess the reliability or capacity of genuine servers. Additionally, converting them to servers has prevented them from being assigned to users with less modern equipment and/or from being assigned to training room use.
- Anecdotal information from field IT personnel indicates that they are retaining older servers and using PCs as servers in order to allow users to save excessive amounts of e-mail and other "personal" files on server hard drives. District Offices of Information Technology have confirmed that many users are, in fact, storing upwards of a gigabyte of information on network drives. These storage demands cannot be sustained on network servers (but can be sustained through the use of drives in users' desktop PCs).
- Accordingly-and to confirm the direction and guidance that the DCMC Information Office and District Offices of Information Technology have already started providing to field IT personnel-Commanders shall by December 17, 1999 (in sequence or in parallel, as appropriate):
    - Restrict users to a "standard" of 40 megabytes of network hard drive storage for e-mail, including any attachments to e-mail sent or received. Microsoft Exchange control settings shall be adjusted so that once a user's network storage of e-mail has exceeded:
        - 40 megabytes, the user will receive automated warnings that he or she has exceeded the standard storage limits.
        - 60 megabytes, the user will be prevented from sending any e-mail until such time as that user's storage has been reduced below 40 megabytes.
    - Personally approve any exceptions to the above limits on an individual basis, but in no case approve individual storage limits above 100 megabytes, nor allow any sending of e-mail until storage that has exceeded 120 megabytes has been reduced below 100 megabytes.
    - Restrict users to a maximum of 40 megabytes of network storage for all other types of files.
    - Direct users to store (or back up) all other files (or copies) on their PC hard drives and/or LS-120 disks.

- Ensure that mission applications, databases, and files necessary for the proper operation of DCMC networks and servers are given absolute priority for network storage space, and that appropriate action is taken to downward adjust the user storage space limits described above in order to accommodate these files.
- After transferring applications and selected files, disconnect from DCMC local and wide area networks any servers whose manufacturer and model designators do not include "Compaq Proliant," "Sun," or "Hewlett Packard" (HP), and whose operating systems are not:
  - Windows NT 4.0 with Service Pack 3 or 5 installed,
  - Windows NT 3.51 with Service Pack 5 installed,
  - Solaris, Novell Netware, or HP-UX,
  - With all the appropriate Y2K "patches" as listed in the attachment to this memorandum.
- Forward any requests for exceptions to the above (e.g., temporarily retaining a PC as a server) to the DCMC Information Officer, through the respective District Commander, for approval on a case-by-case basis. All such requests shall include:
  - Complete and factual justification for the request.
  - And, where servers or PCs are involved:
    - The machine's manufacturer and model designation.
    - Type of central processing unit (e.g., Pentium II 233 megahertz).
    - Certification by the CAO Commander that the operating system has been upgraded as necessary and is fully Y2K compliant.
- Commanders shall submit, through their respective District Commanders, by the indicated dates, the following certifications to the DCMC Information Officer. The DCMC Information Officer shall consolidate and transmit those certifications to the DCMC Commander.
  - December 17, 1999: Compliance with the above taskings, and, additionally, that all desktop PCs' operating systems are:
    - Windows NT 4.0 with Service Pack 3 or 5 installed, or
    - Windows NT 3.51 with Service Pack 5 installed, with
    - All appropriate Y2K "patches" as listed in the attachment.
  - December 30, 1999:
    - All non-Y2K compliant machines have been declared "excess" and have been or are being processed for immediate disposal. (Note: non-Y2K compliant machines are not to be screened for reutilization. They are not usable for any purpose on or after January 1, 2000.)
    - All Y2K compliant desktop PCs previously used as servers have been returned to desktop use.
  - January 21, 2000: All servers and PCs currently using the Windows NT 3.51 operating system have been upgraded to the Command standard of Windows NT 4.0 with Service Pack 3 or 5 and the appropriate Y2K patches.
- The DCMC Information Office and District Offices of Information Technology will be contacting CAOs daily to track progress until all non-Y2K compliant servers have been disconnected from our networks. They will also be tracking progress electronically through "system inventories" run by the DCMC Network Management Center and District

Headquarters. Commanders are to ensure complete cooperation with, and responsiveness to, these inquiries.

- DCMC has promised the senior leadership of DoD and DLA that it shall be completely Y2K compliant. That is a promise DCMC is going to keep. Failure is not an option; delays are not excusable. Commanders are to personally engage on this issue and ensure complete success.

**Points of Contact for Further Information:**
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**Signature:**

THOMAS E. BRUNK
Deputy Commander

Attachment

**HP-UX**

HP-UX 10.01, 10.10, 10.20, and 11.0 are compliant with user installation of Y2K patches. With these patches, HP-UX 10.01, 10.10, 10.20, and 11.0 meet HP's compliance definition which is based on the X/Open standard.

HP-UX 9.0x (and earlier) and HP-UX 10.30 are not compliant and will not undergo engineering to be made compliant. Your HP Sales Representative or HP Reseller can help you find an appropriate Y2K solution.

The following table summarizes the compliance status of HP-UX operating system releases and the recommended user actions:

| HP-UX Version | Compliant with Patches | Will Not Be Made Compliant | Recommended Actions |
|---|---|---|---|
| 11.0 | X | | Install Patches: http://www.software.hp.com/products/Y2K/download.html |
| 10.30 | | X | Contact your HP Sales Rep or Authorized HP Reseller |
| 10.20 | X | | Install Patches: http://www.software.hp.com/products/Y2K/download.html |
| 10.10 | X | | Upgrade: http://www.software.hp.com/y2kupgrades/<br>Install Patches: http://www.software.hp.com/products/Y2K/download.html |
| 10.01 | X | | Upgrade: http://www.software.hp.com/y2kupgrades/<br>Install Patches: http://www.software.hp.com/products/Y2K/download.html |
| 9.10 | X | | Install Patches: http://www.software.hp.com/products/Y2K/download.html<br>More Info: http://www.hp.com/ssg/vintage/68k.html |
| 9.0x & earlier | | X | Upgrade: http://www.software.hp.com/y2kupgrades/<br>More Info: http://www.software.hp.com/products/GT_SUPPORT_Y2K/ |

# Year 2000 Status of Novell Products

The following tables, last modified on 1 December 1999, list Novell products being validated as part of Novell's Project 2000. If patches are required, a link to the downloadable patch is provided. If you are using other Novell products or Novell products not listed in these tables, Novell recommends upgrading to a newer product as indicated below or discontinue use before the turn of the century. All Year 2000 Ready Novell products require a Year 2000 Ready hardware platform (ie. BIOS/RTC).

All links on this document can be accessed from http://www.novell.com/year2000/product.html.

**Status Definitions:**

| Year 2000 Status | Definition |
|---|---|
| Year 2000 Ready | The product accurately processes date data from, into, and beyond the years 1999 and 2000, including leap year calculations, when used in accordance with the product documentation, provided that all products (e.g. hardware, firmware, software) used in combination with Novell software properly exchange date data with it.<br><br>NOTE: If a Y2K date issue is found in a product designated "Year 2000 Ready," the product will continue to receive Year 2000 support after Jan. 1, 2000, in accordance with Novell's Support Life Cycle (see http://support.novell.com/lifecycle), including Year 2000 updates that may be necessary to ensure proper performance. |
| Year 2000 Ready with update | Product has been Year 2000 tested and requires an update |
| Year 2000 Supported | Product has been Year 2000 tested by Novell and has an update pending. |
| Not supported | Product is not Year 2000 supported by Novell - Upgrade to new product or version |

**Update Definitions:**

| Update or Upgrade Information | Definition |
|---|---|
| No update necessary | No Year 2000 issues were identified by Novell testing |
| Update available | Year 2000 patch is available. Follow the link to download the patch. |
| Optional update available | Year 2000 testing revealed issues that do not impact normal product functionality but may impact date functionality in some product utilities. See the Technical Information Document (TID) link for a description of the specific Year 2000 impact on the product. Installation of optional updates is recommended. |

**NetWare Platforms**:

| Product | Status | Update or Upgrade Information | Last Web Update |
|---|---|---|---|
| NetWare v5 | Year 2000 Ready | JVM update to be provided in NW5 SP3. See Third party product list | 3 August 1999 |
| NetWare v4.2 Language Versions (includes Year 2000 Ready English version) | Year 2000 Ready | No update necessary | 26 July 1999 |
| NetWare v4.2 English Only Version | Year 2000 Ready | Optional update available | 26 July 1999 |
| NetWare v4.11/intraNetWare (including SMP and SFTIII support) | Year 2000 Ready | Optional update available | |
| NetWare v4.2/4.11/intraNetWare with Support Pack 7a | Year 2000 Ready | No update necessary | 14 October 1999 |
| NetWare v4.2/4.11/intraNetWare with Support Pack 7 | Year 2000 Ready | No update necessary | 6 October 1999 |
| NetWare v4.11/intraNetWare with Support Pack 6a | Year 2000 Ready | No update necessary | 26 July 1999 |
| NetWare v4.11/intraNetWare with Support Pack 6 | Year 2000 Ready | Optional update available | 26 July 1999 |
| NetWare v4.11/intraNetWare with Support Pack 5b | Year 2000 Ready | No update necessary | 28 September 1999 |
| NetWare v4.10 (not being supported for OS/2, SMP or SFTIII) | Y2K Ready with update - requires 410y2kp2.exe after 410pt8b.exe patches | Update available | 26 July 1999 |
| SMP for NetWare v4.10 (and prior versions) | Not supported - upgrade to NetWare 4.2 SMP or NetWare 5 | . | |
| SFTIII for NetWare v4.10 (and prior versions) | Not supported - upgrade to NetWare 4.2 SFTIII | . | |
| NetWare 4.x versions prior to v4.10 | Not supported - upgrade to NetWare 4.2 or NetWare 5 | . | |

**NetWare Clients**:

| Product | Status | Update or Upgrade Information | Last Web Update |
|---|---|---|---|
| Novell Client v4.6 for Windows NT | Year 2000 Ready | No update necessary | |
| Novell Client v4.51 for Windows NT | Year 2000 Ready | No update necessary | |
| Novell Client v4.5 for Windows NT | Year 2000 Ready | No update necessary | |
| Novell Client v4.3 for Windows NT | Year 2000 Ready | No update necessary | |
| NetWare/intraNetWare Client for NT v4.11b for Windows NT | Year 2000 Ready | No update necessary | |
| NetWare/intraNetWare Client for NT v4.11a (Supports NT OS versions v3.51 and v4.0)(incl. WSMgr) | Year 2000 Ready | Optional update available | |
| NetWare/intraNetWare Client for NT v4.10 and prior versions | Not supported - upgrade to latest client version | . | |
| NETX Client (NETX.EXE) | Not supported - upgrade to latest client version | . | |
| NetWare Client VLM v1.21 | Year 2000 Ready (Recommend Upgrade to latest client version | No update necessary | |
| NetWare Client VLM v1.20 and prior versions | Not supported - upgrade to NetWare Client VLM v1.21 (Recommend Upgrade to latest client version | . | |
| NetWare Client VLMIP | Not supported - upgrade to latest client version | . | |
| NetWare Mobile Client v1.0 | Not supported - no upgrade path | . | |
| NetWare Mobile Client v1.0 all languages | Not supported - no upgrade path | . | |

# Windows NT Server 3.51  (English) - Win NT

**Prerequisites:** Windows NT 3.51 Service Pack 5 and a hot fix

**Product Details:**
Windows NT 3.51 is compliant with the following software installed:
1.  Microsoft Windows NT Service Pack 5 (SP5) for Windows NT 3.51
    - English ftp://ftp.microsoft.com/bussys/winnt/winnt-public/fixes/usa/NT351/ussp5
2.  A software update for known compliance issues for Windows NT Server Version 3.51 Service Pack 5.
**The software update addresses the following issues:**
1.  Simulated RTC presents the century byte with 19 instead of 20 (Microsoft Knowledge Base Article Q193376). The simulated Real Time Clock (RTC) will present the century byte representing 19 instead of 20 in the 21st Century. This causes MS-DOS-based programs that access the Real Time Clock to receive the wrong date. For example, the year 2000 is interpreted as the year 1900.
2.  File and Print Services for NetWare (FPNW) Logout.exe incorrectly reports Year after Jan. 1, 2000 (Microsoft Knowledge Base Article Q186669). The File and Print Services for NetWare (FPNW) service Logout.exe program may report the year incorrectly for files created on or after January 1, 2000.
3.  Date of Print Job may be displayed incorrectly in print queue (Microsoft Knowledge Base Article Q191768). When you view a print job spooled on another print server, such as Windows 9x or LAN Manager, from a Windows NT client, the date displayed in the print queue may be incorrect and possibly off by one year.
4.  WINS/DHCP Admin show expiration dates 2000 - 2009 with one digit (Microsoft Knowledge Base Article Q193371). Windows Internet Name Service (WINS) Admin and Dynamic Host Configuration Protocol (DCHP) Service Admin display the expiration dates 2000 through 2009 with one digit (for example, 1/1/2000 is displayed as 1/1/0 instead of 1/1/00).
5.  User Manager does not recognize February 2000 as a leap year (Microsoft Knowledge Base Article Q175093). When you set an account to expire on February 29, 2000, User Manager displays the following message: "February only has 28 days in this year."
6.  Last Day of the Month reverts back to first day of same month (Microsoft Knowledge Base Article Q193422). As the Date/Time utility attempts to change the date from the last day of the month to the first day of the following month, it displays the first day of the current month instead. For example, instead of displaying February 1, 2000, one day after the date was January 31, 2000, the Date/Time utility reports the date as January 1, 2000.
7.  Migration changes NetWare accounts expiration date (Microsoft Knowledge Base Article Q193434). Novell NetWare accounts with an expiration date January 1, 2000, or later are migrated to Windows NT with the incorrect expiration date.
8.  Problems in Date/Time after choosing Feb 29 in leap year (Microsoft Knowledge Base Article Q193461). You may experience one or more of the following issues in Windows NT Version 3.51:
    1)  Using the Date/Time tool in Control Panel, if you select February 29 in a leap year, select a non-leap year, and then click Cancel, the system date is set to a random year.
    2)  Using the Date/Time tool in Control Panel, if you are editing any field other than the seconds field and the time passes midnight, clicking Cancel sets the date to a seemingly random values.
9.  FTP File Service displays incorrect file date for Year 2000 (Microsoft Knowledge Base Article Q182597). The FTP service in Windows NT 3.51 may report the year incorrectly for files created on or after Jan 1, 2000. For example, January 1, 2000 is displayed as 01/01/100.

# Windows NT Workstation 4.0 SP3 (English) - Win NT

**Prerequisites:** Windows NT Service Pack 3, and Year 2000 fixes

**Updated Information:**
A new issue has been discovered in versions of Outlook Express installed by Internet Explorer 4. Users of Outlook express should consult the Internet Explorer Product Guide for details.

Through our ongoing testing, Microsoft has identified two additional acceptable deviations. (April 1999) These issues are considered to be minor and do not affect the compliance rating of Windows NT 4.0 Service Pack 3.

A year 2000 issue has been discovered in the Jet 3.5 data engine. Microsoft has provided a software update to address this issue. Consult the MDAC product guide for details.

In summary, for users of Windows NT Workstation 4.0 with SP3, the options and features that need to be addressed in order to attain a status of Compliant# are:

- The base Windows NT Workstation operating system. Not Compliant; several updates are required to reach Compliant# status.
- Active Directory Services Interface version 1.0. Not Tested; upgrade to ADSI v2.0 required to ensure Compliant status.
- Microsoft FrontPage 97. Not Compliant; updates required to reach Compliant status -- install FrontPage 97 Year 2000 updates.
- Microsoft FrontPage 97 Workstation Extensions. Not Compliant; upgrade required to reach Compliant status -- install FrontPage 98 Extensions from the Windows NT Option Pack.
- Microsoft Internet Explorer version 2.0. Not Tested; upgrade to v4.02 or greater required to ensure Compliant status.
- Microsoft Internet Explorer version 3.02. Not Compliant; updates required to reach Compliant status -- Year 2000 Update for IE 3.02, Microsoft Virtual Machine (Build 1520), and New Certificates.
- Microsoft Internet Explorer version 4.01. Not Compliant; updates required to reach Compliant status -- IE 4.01 SP2 and Outlook Express 4.01 year 2000 software update OR IE 4.01 SP1 and additional IE 4.01 SP1 year 2000 software updates below and Outlook Express 4.01 year 2000 software update.
  1. MDAC Data Coercion Library (MSDADC.DLL): Microsoft recommends going to the latest version of MDAC (version 2.1 Service Pack 1 (2.1.1.3711.11) or higher). An updated version of MDAC 1.5 is available in Internet Explorer 4.01 Service Pack 2, or you can download the latest version of MDAC. For more information and to download the latest version of MDAC please go to MS Data Access Components Year 2000 Product Guide, http://www.microsoft.com/technet/year2k/product/user_list.asp?prod=1554.
  2. Microsoft Wallet: Users must enter month, day, and year for expiration dates beyond 2000. Otherwise, information may be parsed incorrectly. Note that the Microsoft Wallet product is now known as Microsoft Passport. To resolve this issue, install Microsoft Passport from http://www.passport.com/ and follow the instructions for Get a Free Passport.
  3. Date/Time Picker (comctl32.dll): When Regional Settings from Control Panel are set to use 2 digits for years, the Date/Time Picker function may not return the proper date. Install the latest version of comctl32.dll or update comctl32.dll to the latest version from http://www.microsoft.com/msdownload/ieplatform/ie/comctrlx86.asp.
  4. Microsoft Virtual Machine: Many versions of the Microsoft Virtual Machine Version, including the VM that ships with Service Pack 1, have year 2000 date related issues. Please refer to the Microsoft Virtual Machine Year 2000 Product Guide Microsoft Virtual Machine, http://www.microsoft.com/technet/promo/javavm.htm, for details and recommendations to address issues.
  5. Outlook Express Issue (software update is not part of IE 4.01 SP1 or SP2): If Outlook Express (OE) 4.01 (SP1 or SP2) receives an IMAP mail message or a News message with a 2-digit year as the sent date, the date can be misinterpreted under certain conditions.  If the 2-digit year is anything other than '99', OE will assume the century value is the same as the current century.  If the current year is 2000, and a 2-digit date is received as '97', then the year will be interpreted as 2097.  However, there is one special case when different logic is applied.  If the 2-digit year "99" is received and the current year is a multiple of 100 (e.g. 2000), the year will be interpreted as the current year plus 98 (e.g. 2098).
- Microsoft Internet Locator Service version 1.0. Not Compliant; upgrade required to reach Compliant status.
- Site Server Express version 2.0. Not Compliant; upgrade required to reach Compliant status -- install Internet Locator Service v2.0.

# Windows NT Workstation 4.0 SP5 (English) - Win NT

**Updated Information**
A new  issue has been discovered in versions of Outlook Express installed by Internet Explorer 4. Users of Outlook Express should consult the Internet Explorer Product Guide for details.

**System Component Actions (Prior to the Installation of SP5)**

| Feature Name | Version | Action Required |
|---|---|---|
| Microsoft Internet Explorer (IE) | Multiple Versions | Upgrade to IE4.01 SP2 or newer including any applicable Year 2000 software Updates.<br><br>For information on additional Year 2000 Updates for IE, refer to the Internet Explorer compliance documents.<br><br>(Users who prefer to remain on IE 4.01 SP1 should refer to the IE Year 2000 Compliance document available HERE for appropriate actions. Additional software updates are required in addition to IE SP1.)<br><br>Users who wish to install IE 4.01 SP2 or IE 5 Technology without adding IE icons and without making IE the default browser should consult KB article Q224088. |

**Optional Component Actions (Prior to the Installation of SP5)**

| Feature Name | Version | Action Required |
|---|---|---|
| Microsoft Data Access Components (MDAC) | Multiple Versions | Install MDAC 2.1 SP1 or newer including any applicable Year 2000 software Updates.<br><br>(Users who prefer to remain on MDAC 2.0 SP1 should refer to the MDAC Year 2000 Compliance document for appropriate actions.)<br><br>A year 2000 update for the Jet3.5 engine has recently been released. (April 1999) Consult the MDAC product guide for details. |
| Microsoft FrontPage 97 | "97" | Install FrontPage 97 Year 2000 Updates |
| Microsoft FrontPage 97 Server Extensions | "97" | Install FrontPage 98 Server Extensions from the Server Extensions Download Section. |
| Microsoft Internet Locator Service | 1.0 | Install Microsoft Internet Locator Service Version 2.0. |
| Site Server Express | 2.0 | Uninstall Site Server Express 2.0 and install Site Server Express 3.0. |

Post SP5 Update Concerns:
1. BIOS Date Value does not Immediately Update on January 1, 2000. (Q216913) When the Window NT System Time value rolls over from the year "1999" to "2000", the Century Byte value stored in the real time clock (RTC) is not changed until up to one hour later when the time daemon writes out the date. Customers should evaluate their exposure to this issue to determine whether to apply this update. This issue only affects systems with older BIOSes that do not automatically update the century byte on reboot (Contact your hardware manufacturer for BIOS details). This fix was originally included in SP5 but it has been re-released in July 1999 to address additional issues. Please consult the KB article for details.
2. NET USER /TIME Command does not work in Year 2000 (Q240195) The /TIMES function can be used to set the valid logon times of Windows NT user accounts via the command line utility NET USER. The Y2K issue causes the /TIMES function to cease functioning in years 2000 or greater. The User Manager GUI application is not affected and can be used to effectively set account valid logon times in the year 2000 and beyond.

# Product Compliance Status List -- Solaris 7 SPARC

Product compliance statuses are based on the following:
1.  Use of a Year 2000-compliant operating system, where applicable.
2.  Sun recommends installation of the latest patch levels for any Year 2000 patch referenced in this table.
3.  Sun recommends installation of all prerequisite patches to any Year 2000 patch referenced in this table. Prerequisite patches are identified in the "readme" file of the Year 2000 patches.

Year 2000 Compliance Status Codes:
0.  Defines a product that contains no date-related content.
1.  Defines a product that was Year 2000 compliant at the time of release. Sometimes free modifications may be needed after release.
2.  Defines a product that requires Year 2000 modifications for Year 2000 compliance.
3.  Product under review
4.  Year 2000 Non-Compliant-Upgrade/migrate to a Year-2000 Compliant Product.
5.  Defines a source code product that could be modified and implemented without review by Sun of the finished binary product. This product class is not certified as being Year 2000 compliant as shipped from Sun or as implemented by the user.

| Product Name | Compliance Status | Comments |
|---|---|---|
| Solaris Operating System | 1: Y2000 compliant | Modifications: http://www.sun.com/y2000/jumppage-temp/solaris7-jump.html |
| Documentation | 1: Y2000 compliant | |
| Desktop Media Kit | *: Other - see comments | Information on bundle components: http://www.sun.com /y2000/cpl/bundle.cgi?record=4000206 |
| Server Media Kit | *: Other - see comments | Information on bundle components: http://www.sun.com /y2000/cpl/bundle.cgi?record=4000207 |
| Flash PROM Update Multimedia AnswerBook CD | 1: Y2000 compliant | |
| Desktop Media Kit | 1: Y2000 compliant | Information on bundle components: http://www.sun.com /y2000/cpl/bundle.cgi?record=5500017 |
| Server Media Kit | 1: Y2000 compliant | Information on bundle components: http://www.sun.com /y2000/cpl/bundle.cgi?record=5500019 |